CLAIMS

What is claimed is:

1. A method for obscuring an aircraft from infrared detection from an external viewing location, comprising the steps of

providing the aircraft in flight having an externally viewable hot region associated therewith, wherein the hot region has a temperature greater than 150°C;

providing on the aircraft a source of an obscuring agent, wherein the obscuring agent comprises carbon dioxide gas, or water vapor, or a mixture thereof; and

ejecting the obscuring agent from a dispensing location on the aircraft so as to flow between the hot region and the external viewing location, wherein the obscuring agent has a temperature of less than that of the hot region.

2. The method of claim 1, wherein the step of providing the aircraft includes the step of

providing a transport aircraft.

3. The method of claim 1, wherein the step of providing the aircraft includes the step of

providing the aircraft wherein the hot region is a structural portion of the aircraft.

4. The method of claim 1, wherein the step of providing the aircraft includes the step of

providing the aircraft wherein the hot region is a plume of hot gas flowing from the aircraft.

5. The method of claim 1, wherein the step of providing on the aircraft the source of the obscuring agent includes the step of

providing the source of the obscuring agent comprising a supply of the

obscuring agent carried on board the aircraft.

6. The method of claim 1, wherein the step of providing on the aircraft the source of the obscuring agent includes the step of

providing the source of the obscuring agent comprising a supply of the obscuring agent generated on board the aircraft.

7. The method of claim 1, wherein the step of providing on the aircraft the source of the obscuring agent includes the step of

providing the source of the obscuring agent comprising a portion of the exhaust gas of a gas generating engine on the aircraft.

8. The method of claim 1, wherein the step of providing on the aircraft the source of the obscuring agent includes the step of

providing the source of the obscuring agent as a portion of an exhaust gas of a main propulsion engine of the aircraft.

9. The method of claim 1, wherein the step of providing on the aircraft includes the step of

providing carbon dioxide gas as the obscuring agent.

10. The method of claim 1, wherein the step of providing on the aircraft includes the step of

providing water vapor as the obscuring agent.

11. The method of claim 1, wherein the step of providing on the aircraft includes the step of

providing a mixture of carbon dioxide gas and water vapor as the obscuring agent.

12. The method of claim 1, wherein the step of providing on the aircraft includes the step of

providing solid-material particles in the obscuring agent.

13. The method of claim 1, wherein the step of providing on the aircraft the source of the obscuring agent includes the step of

providing solid metal particles in the obscuring agent.

14. The method of claim 1, wherein the step of ejecting includes the step of

ejecting the obscuring agent so as to obscure a portion of an exhaust gas of a gas-generating engine of the aircraft.

15. The method of claim 1, wherein the step of ejecting includes the step of

ejecting the obscuring agent so as to obscure a portion of an exhaust gas of a main propulsion engine of the aircraft.

16. The method of claim 1, wherein the step of ejecting includes the step of

ejecting the obscuring agent at a temperature of less than about 150°C.

17. A method for obscuring an aircraft from infrared detection from an external viewing location, comprising the steps of

providing a transport aircraft in flight having an externally viewable hot region associated therewith, wherein the hot region has a temperature greater than 150°C, and wherein the hot region is a plume of hot gas flowing from the aircraft;

providing on the aircraft a source of an obscuring agent, wherein the obscuring agent comprises a mixture of carbon dioxide gas and water vapor, and wherein the obscuring agent comprises a portion of the exhaust gas of an engine on the aircraft; and

ejecting the obscuring agent from a dispensing location on the aircraft so as to flow between the hot region and the external viewing location, wherein the obscuring agent has a temperature of less than that of the hot region.

18. The method of claim 17, wherein the step of providing on the aircraft the source of the obscuring agent includes the step of

providing an additional source of the obscuring agent as a supply of the obscuring agent carried on board the aircraft.

19. The method of claim 17, wherein the step of providing on the aircraft the source of the obscuring agent includes the step of

providing the source of the obscuring agent comprising a portion of the exhaust gas of a main propulsion engine of the aircraft.

20. The method of claim 17, wherein the step of providing on the aircraft the source of the obscuring agent includes the step of

providing the source of the obscuring agent comprising a mixture of carbon dioxide gas, water vapor, and solid-material particles.

21. The method of claim 17, wherein the step of providing on the aircraft the source of the obscuring agent includes the step of

providing the source of the obscuring agent comprising a mixture of carbon dioxide gas, water vapor, and solid metal particles.

22. A method for obscuring an object from infrared detection from an external viewing location, comprising the steps of

providing the object having an externally viewable hot region associated therewith, wherein the hot region has a temperature greater than 150°C;

providing a source of an obscuring agent, wherein the obscuring agent comprises carbon dioxide gas, or water vapor, or a mixture thereof; and

ejecting the obscuring agent from a dispensing location so as to flow between the hot region and the external view location, wherein the obscuring agent has a temperature of less than that of the hot region.